UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,826	12/28/2000	John Alson Hicks III	BS00343	5202

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	09/749,826	HICKS ET AL.
	Examiner	Art Unit	
	Chris Parry	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,17-20,23-34,36 and 37* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,17-20,23-34,36 and 37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/ are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 17-34 and 36-37 have been considered but are moot in view of the new ground(s) of rejection.

With respect to applicant's argument (page 12, last ¶) stating, the combined teaching of Rakib and Russo fail to disclose "*a plurality of tuners and demodulators sending information signals to a media bus,*" "*a system data bus coupled to the media bus and receiving the information signals,*" and "*a network bus coupled to the system data bus and receiving the information signals*" the examiner respectfully disagrees.

Rakib discloses in figure 7A, a plurality of tuners (700, 702, and 704; Col. 32, lines 49-52) and demodulators (738 and 746) sending information signals to a media bus (756) (Col. 34, lines 16-52). Rakib teaches demodulator 738 outputs data to MPEG encoder 747 which forwards the data to host bus 756 or "media bus".

Rakib further discloses in figure 7A, a system data bus (756) coupled to the media bus (coupled meaning joined for a combined effect) and receiving the information signals (Col. 33, line 32 to Col. 34, line 52).

Rakib then discloses in figure 7A, a network bus (760) coupled (via IP video circuit 758) to the system data bus (756) and receiving information signals (Col. 34, lines 48-52 and Col. 36, lines 31-37).

In regards to applicant's argument (page 13, line 2) stating, Rakib does not teach the bus 756 having dual architecture, the examiner respectfully disagrees. Rakib teaches bus 756 has the ability to transmit control data to the tuner 702 (Col. 35, lines 56-61), transmits video data to IP video circuit 758 (Col. 34, lines 37-52), receive video data from tuners and demodulators (Col. 34, lines 37-52), and host bus 756 is a high capacity multiplexed bus capable of handling high bandwidth applications (Col. 33, lines 35-55).

2.   Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the fact(s) noticed.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib et al. "Rakib" (U.S. 6,889,385) in view of Russo (U.S. 6,732,366).

Regarding Claim 1, Rakib discloses a system for multimedia on demand (figure 7A – 308), the system comprising: a plurality of tuners (780, 700, 702, 704 – figure 7A) and demodulators (820, 738, 746 – figure 7A) sending information signals to a media bus (756 – figure 7A) (Col. 32, lines 49-52, Col. 33, lines 24-39, Col. 34, lines 16-52).

Rakib teaches, a system data bus (756 – figure 7A) coupled to the media bus
(756 – figure 7A) and receiving the information signals (figure 7A) (Col. 35, line 56 to
Col. 36, line 30).

Rakib discloses, a network bus (760 – figure 7A) coupled to the system data bus
(756 – figure 7A) and receiving the information signals (figure 7A) (Col. 34, lines 48-52
and Col. 36, lines 31-37).

Rakib further discloses a mass storage device (135 – figure 7A) connected to the
system data bus... (756 – figure 7A).

Rakib teaches, a data switch (786 – figure 7A) connected to the network bus
(760 – figure 7A), the data switch receiving the information signals and sending the
information signals and sending the information signals to one or more switch ports
(Col. 33, lines 32-35 and Col. 34, lines 53-59).

Rakib further teaches a processor (728 – figure 7A) connected to the system
data bus (756 – figure 7A) (Col. 33, lines 24-35) and memory (129 – figure 7A)
connected to the system data bus (756 – figure 7A).

However, Rakib fails to specify that the mass storage device (135 – figure 7A) is
used for storing the information signals. In an analogous art, Russo discloses a system
for multimedia on demand (Col. 3, lines 9-30), the system comprising a mass storage
device (110 – figure 2)... which stores the information signals (Col. 7, lines 44-46).
Therefore, it would have been obvious to one of ordinary skill in the art at the time the
invention was made to modify Rakib with the teachings of Russo in order for the mass
storage device to store information signals for the benefit of storing incoming

programming information which can be used to improve the user's on-demand viewing experience.

As for Claim 2, Rakib and Russo disclose, in particular Russo teaches, a video overlay processor (160 – figure 2) coupled to the media bus (154 – figure 2) and to the system data bus (152 – figure 2) (Col. 9, line 62 to Col. 10, line 4).

As for Claim 3, Rakib and Russo disclose, in particular Rakib teaches, a system further comprising cipher/decipher logic (726, 786 – figure 7A) coupled to the plurality of tuners and demodulators and to the media bus (figure 7A) (Col. 36, lines 4-12 and lines 31-37).

As for Claim 5, Rakib and Russo disclose, in particular Rakib teaches, a system comprising a web server coupled to the system data bus, the web server providing access to content stored in the mass storage device (Col. 44, line 51 to Col. 45, line 5).

As for Claim 6, Rakib and Russo disclose, in particular Rakib teaches, a graphical user interface stored in the memory that provides access to content stored in the mass storage device (Col. 44, lines 51-67).

As for Claim 7, Rakib and Russo disclose, in particular Rakib teaches, a

graphical user interface stored in the memory that provides access to information

available from the data switch (Col. 44, lines 51-67).

5.   Claims 17-19, and 25-33 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Rakib in view of Russo and further in view of Craig (U.S. 5,790,176).

Regarding Claim 17, Rakib discloses a system for multimedia on demand (figure

7A – 308), the system comprising: a plurality of tuners (780, 700, 702, 704 – figure 7A)

and demodulators (820, 738, 746 – figure 7A) sending information signals to a media

bus (761 – figure 7A; [line 761 is the line in fig. 7A that connects conditional access

modules 786 and 726 along with MPEG encoder 747 to host bus 756, thus line 761 is a

media bus as it transfers data from a plurality of media components to host bus 756])

(Col. 32, lines 49-52, Col. 33, lines 24-39, Col. 34, lines 16-52, and Col. 36, lines 13-

37).

Rakib teaches, a system data bus (756 – figure 7A) connected to the media bus

(761 – figure 7A) and connected to the plurality of tuners and demodulators and

receiving the information signals (figure 7A) (Col. 35, line 20 to Col. 36, line 30).

Rakib discloses, a network bus (760 – figure 7A) connected (via IP video circuit

758) to the system data bus (756 – figure 7A) and receiving the information signals

(figure 7A) (Col. 34, lines 48-52 and Col. 36, lines 31-37).

Rakib further discloses a mass storage device (135 – figure 7A) connected to the

system data bus... (756 – figure 7A).

Rakib teaches a processor (728 – figure 7A) connected to the system data bus

(756 – figure 7A) (Col. 33, lines 24-35) and memory (129 – figure 7A) connected to the

system data bus (756 – figure 7A).

However, Rakib fails to specify that the mass storage device (135 – figure 7A) is

used for storing the information signals and is adapted to receive and store the

information signals as a plurality of multimedia content items. Rakib further fails to

disclose storing a multimedia-on-demand data table and instructions in memory as

claimed.

In an analogous art, Russo discloses a system for multimedia on demand (Col.

3, lines 9-30), the system comprising a mass storage device (110 – figure 2)…which

stores the information signals, the mass storage device adapted to receive and store

the information signals as a plurality of multimedia content items (Col. 7, lines 44-46,

Col. 8, lines 7-41, and Col. 10, lines 21-25).

Russo discloses, a system comprising a memory (158 – figure 2) storing a

multimedia-on-demand data table and multimedia-on-demand instructions (Col. 9, line

62 to Col. 10, line 5 and Col. 10, lines 14-20).

Russo further discloses, the multimedia-on-demand table including a plurality of

multimedia content usage records, each multimedia content usage record adapted to

include a multimedia content usage indicator field to store a multimedia content usage

indicator, the multimedia content usage indicator associated with a multimedia content

item (i.e., which programs stored on the storage device have been viewed) stored on

the mass storage device (Col. 5, lines 3-10, Col. 9, line 62 to Col. 10, line 5, and Col.

10, lines 14-39).

Russo teaches the multimedia-on-demand instructions to be executed by the

processor, the multimedia-on-demand instructions including instructions to –

automatically receive the plurality of multimedia content items... (Col. 10, lines 9-39).

Russo teaches, the multimedia-on-demand instructions to be executed the

processor, the multimedia-on-demand instructions including instructions to – send a

multimedia-on-demand usage message, the multimedia-on-demand usage message to

be based at least in part on the multimedia-on-demand data table (Col. 5, lines 12-31

and Col. 10, lines 9-58). Therefore, it would have been obvious to one of ordinary skill in

the art at the time the invention was made to modify Rakib with the teachings of Russo

to include a multimedia-on-demand table and instructions for the benefit of improving

the user's on-demand viewing experience.

Rakib and Russo fail to disclose receiving the multimedia content item at a

transmission rate that is less than a real time transmission rate in bytes per second.

In an analogous art, Craig discloses receiving a multimedia content item at a

transmission rate that is less than a real time transmission rate in bytes per second (*i.e.,*

slower than real-time) (Col. 11, line 60 to Col. 12, line 5), thus providing multiple service

levels and charging subscribers accordingly. Therefore, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to modify the system

of Rakib and Russo to include receiving the multimedia content item at a less-than-real-

time transmission rate for the benefit of providing flexible service arrangements that match the needs of subscribers.

As for Claim 18, the combination of Rakib, Russo, and Craig disclose, in particular Russo teaches wherein each multimedia content usage record is adapted to include a multimedia content identifier field to store a multimedia content identifier, the multimedia content identifier to correspond to a multimedia content item of the plurality of multimedia content items stored on the mass storage device (Col. 5, lines 3-41).

As for Claim 19, the combination of Rakib, Russo, and Craig disclose, in particular Russo teaches wherein a multimedia content usage indicator is selected from the group consisting of a content played indicator, a content purchased indicator, and a content unused indicator (Col. 9, line 62 to Col. 10, line 20).

As for Claim 25, the combination of Rakib, Russo, and Craig disclose, in particular Russo teaches, wherein the multimedia-on-demand instructions include instructions to receive the plurality of multimedia content items from a multimedia-on-demand service provider, the multimedia-on-demand service provider selected from the group consisting of a direct broadcast satellite television service provider, a cable television service provider, a terrestrial broadcast television service provider, a wireless broadband data service provider, and a wired broadband data service provider (Col. 8, lines 22-41).

Regarding Claim 26, Rakib discloses a method for providing multimedia-on-

demand, the method comprising: receiving information signals at a plurality of tuners

(780, 700, 702, 704 – figure 7A) and demodulators (820, 738, 746 – figure 7A); sending

the information signals to a media bus (761 – figure 7A; [line 761 is the line in fig. 7A

that connects conditional access modules 786 and 726 along with MPEG encoder 747

to host bus 756, thus line 761 is a media bus as it transfers data from a plurality of

media components to host bus 756]) (Col. 32, lines 49-52, Col. 33, lines 24-39, Col. 34,

lines 16-52, and Col. 36, lines 13-37).

Rakib further teaches receiving the information signals over a system data bus

(756 – figure 7A) connected to the media bus (761 – figure 7A) and connected to the

plurality of tuners and demodulators (Col. 35, line 20 to Col. 36, line 30).

Rakib discloses receiving the information signals over a network bus (760 –

figure 7A) connected (via IP video circuit 758) to the system data bus (756 – figure 7A)

(Col. 34, lines 48-52 and Col. 36, lines 31-37).

Rakib further discloses…a mass storage device (135 – figure 7A) connected to

the system data bus… (756 – figure 7A).

Rakib teaches receiving information signals at a data switch (786 – figure 7A)

connected to the network bus (760 – figure 7A) (Col. 33, lines 32-35 and Col. 34, lines

53-59).

Rakib further teaches, sending the information signals to one or more switch

ports of the data switch (Col. 33, lines 32-35 and Col. 34, lines 53-59).

Rakib discloses processing the information signals at a processor (729 –figure

7A) connected to the system data bus (756 – figure 7A) (Col. 33, lines 24-35) and

memory (129 – figure 7A) connected to the system data bus (756 – figure 7A).

However, Rakib fails to specify that the mass storage device (135 – figure 7A)

receives information signals and is adapted to receive and store the information signals

as a plurality of multimedia content items. Rakib further fails to disclose storing

information signals in memory as claimed.

In an analogous art, Russo discloses a method for multimedia on demand (Col.

3, lines 9-30), the method comprising a mass storage device (110 – figure 2)...that

receives the information signals, and stores the information signals (Col. 7, lines 44-46,

Col. 8, lines 7-41, and Col. 10, lines 21-25).

Russo discloses a method for storing the information signals in memory (158 –

figure 2) connected to the system data bus (152 – figure 2) (Col. 9, line 62 to Col. 10,

line 5 and Col. 10, lines 14-20).

Russo teaches, processing an instruction to automatically receive a first

multimedia content item... (Col. 10, lines 9-39).

Russo teaches, storing the first multimedia content item (Col. 10, lines 14-20).

Russo discloses, modifying a data table to include a first multimedia content

identifier, the first multimedia content identifier corresponding to the first multimedia

content item (i.e., which programs stored on the storage device have been viewed) (Col.

5, lines 3-10, Col. 9, line 62 to Col. 10, line 5, and Col. 10, lines 14-39).

Russo teaches, sending a multimedia usage report, the multimedia-on-demand

usage message to be based at least in part on the multimedia-on-demand data table

(Col. 5, lines 12-31 and Col. 10, lines 9-58). Therefore, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to modify Rakib with

the teachings of Russo to include a multimedia-on-demand table and instructions for the

benefit of improving the user's on-demand viewing experience.

Rakib and Russo fail to disclose processing the first multimedia content item at a

transmission rate that is less than a real time transmission rate in bytes per second. In

an analogous art, Craig discloses processing the first multimedia content item at a

transmission rate that is less than a real time transmission rate in bytes per second (*i.e.*,

slower than real-time) (Col. 11, line 60 to Col. 12, line 5), thus providing multiple service

levels and charging subscribers accordingly. Therefore, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to modify the system

of Rakib and Russo to include processing the first multimedia content item at a less-

than-real-time transmission rate for the benefit of providing flexible service

arrangements that match the needs of subscribers.

As for Claim 27, the combination of Rakib, Russo, and Craig disclose, in

particular Russo teaches the method further comprising: receiving a multimedia content

item usage instruction (play command) related to the first multimedia content item (Col.

11, lines 2-10).

Russo further teaches, directing usage of the first multimedia content item based at least in part on the multimedia content item usage instruction (play command) (Col. 8, lines 42-52 and Col. 10 lines 20-32).

Russo further teaches updating the data table based at least in part on the multimedia content item usage instruction (Col. 9, line 62 to Col. 10, line 9).

As for Claim 28, the combination of Rakib, Russo, and Craig disclose, in particular Russo teaches, wherein the multimedia content item usage instruction is an instruction to playback the multimedia content item as part of a multimedia content item viewing transaction (Col. 6, lines 45-65).

As for Claim 29, the combination of Rakib, Russo, and Craig disclose, in particular Russo teaches, wherein updating the data table based at least in part on the multimedia content item usage instruction includes storing a first multimedia content item usage indicator, the first multimedia content item usage indicator associated with the first multimedia content identifier (Col. 5, lines 3-10, Col. 9, line 62 to Col. 10, line 5, and Col. 10, lines 14-39).

As for Claim 30, the combination of Rakib, Russo, and Craig disclose, in particular Russo teaches, wherein the multimedia usage report is based at least in part on the first multimedia content item usage indicator (Col. 6, lines 45-62 and Col. 10, lines 20-48).

As for Claim 31, the combination of Rakib, Russo, and Craig disclose, in particular Russo teaches, wherein the first multimedia content item usage indicator is a content played indicator (Col. 10, lines 25-32).

As for Claim 32 and 33, the combination of Rakib, Russo, and Craig disclose, in particular Russo teaches, the method further comprising: automatically receiving a second multimedia content item... (Col. 9, line 62 to Col. 10, line 19).

Russo further teaches, storing the second multimedia content item (Col. 7, lines 41-46).

Russo further teaches, updating the data table to include a second multimedia content item identifier, the second multimedia content item identifier corresponding to the second multimedia content item (Col. 9, line 62 to Col. 10, line 9).

However, the combination of Rakib, Russo, and Craig fail to specifically disclose the second multimedia content item will replace the first multimedia content item and storing the second multimedia content item includes deleting the first multimedia content item. The examiner gives Official Notice that it is notoriously well known in the art to replace a first stored item with a second item by deleting the first item. Furthermore, it is well known that upon deleting an item, its record would be removed from the list of programming selections available to the user on the storage medium since the item is no longer available to the user. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of

Rakib, Russo, and Craig with the replacement of content of well-known prior art in order to allow a newer version of content to be received or to enable the receiving of new content by deleting older content in order to free up available storage space.

6.   Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib and Russo as applied to claim 1 above, and further in view of Barton et al. "Barton" (U.S. 2002/0118954).

As for Claim 4, Rakib and Russo fail to disclose a storage position identifier for each multimedia content item stored in the memory, the storage position identifier specifying a logical storage position for the multimedia content item, the storage position identifier received from a service provider and updated by the service provider.

In an analogous art, Barton discloses a storage position identifier (aggregate attributes, e.g., viewer-based program ranking ¶ 210-217) for each multimedia content item stored in the memory, the storage position identifier specifying a logical storage position for the multimedia content item (¶ 123), the storage position identifier received from a service provider and updated by the service provider (¶ 219-220), thus enabling service providers more compelling ways to promote viewing of television programming. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Rakib, Russo, and Craig with the teachings of Barton to include a storage position identifier for the benefit of providing a more engaging television viewing experience.

7.   Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Rakib, Russo, and Craig as applied to claim 17 above, and further in view of Chou

(U.S. 6,637,031).

As for Claims 23 and 24, the combination of Rakib, Russo, and Craig disclose

wherein a portion of the multimedia content item being less than the entirety of the

multimedia content item is received at a transmission rate that is less than the playback

rate in bytes per second (i.e., where the entirety of the content is received at a rate less

than the playback rate [Craig – Col. 11 line 43 to Col. 12, line 5], a portion thereof is

inherently also received at a rate that is less than the playback rate).

However, the combination of Rakib, Russo, and Craig fail to disclose making a

determination, based at least in part on the transmission rate and playback rate, that

continuous playback of the entirety of the item can begin prior to the receipt of the

entirety of the item.

In an analogous art, Chou discloses that continuous playback of the entirety of

the multimedia content item can begin prior to receipt of the entirety of the multimedia

content item, and based at least in part on the transmission rate and the playback rate

(Col. 2, lines 7-18). Therefore, it would have been obvious to one of ordinary skill in the

art at the time the invention was made to modify the system of Rakib, Russo, and Craig

with the teachings of Chou to begin playback of an incomplete file in order to allow a

user to begin watching media content without having to wait for long periods of time for

the entire transfer to be complete.

8.   Claims 20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Rakib, Russo, and Craig as applied to claims 17 and 26 above, and further in view

of Barton.

As for Claims 20 and 34, the combination of Rakib, Russo, and Craig fail to

disclose a storage position identifier for each multimedia content item, the storage

position identifier specifying a logical storage position for the multimedia content item,

the storage position identifier received from a service provider and updated by the

service provider with each change in the multimedia-on-demand data table.

In an analogous art, Barton discloses a storage position identifier (aggregate

attributes, e.g., viewer-based program ranking ¶ 210-217) for each multimedia content

item, the storage position identifier specifying a logical storage position for the

multimedia content item (¶ 123), the storage position identifier received from a service

provider and updated by the service provider with each change in the multimedia-on-

demand data table (¶ 219-220), thus enabling service providers more compelling ways

to promote viewing of television programming. Therefore, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to modify the system

of Rakib, Russo, and Craig with the teachings of Barton to include a storage position

identifier for the benefit of providing a more engaging television viewing experience.

9.   Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib in

view of Russo, in view Craig, and in view of Chou.

Regarding Claim 36, Rakib discloses a method for providing multimedia-on-demand, the method comprising: receiving information signals at a plurality of tuners (780, 700, 702, 704 – figure 7A) and demodulators (820, 738, 746 – figure 7A) (Col. 32, lines 49-52, Col. 33, lines 24-39, Col. 34, lines 16-52).

Rakib teaches, sending the information signals to a media bus (761 – figure 7A; [line 761 is the line in fig. 7A that connects conditional access modules 786 and 726 along with MPEG encoder 747 to host bus 756, thus line 761 is a media bus as it transfers data from a plurality of media components to host bus 756]) connected to the plurality of tuners and demodulators (Col. 32, lines 49-52, Col. 33, lines 24-39, Col. 34, lines 16-52, and Col. 36, lines 13-37).

Rakib further teaches receiving the information signals over a system data bus (756 – figure 7A) connected to the media bus (761 – figure 7A) (Col. 35, line 56 to Col. 36, line 30).

Rakib discloses, receiving the information signals over a network bus (760 – figure 7A) connected (via IP video circuit 758) to the system data bus (756 – figure 7A) (Col. 34, lines 48-52 and Col. 36, lines 31-37).

Rakib further discloses…a mass storage device (135 – figure 7A) connected to the system data bus… (756 – figure 7A).

Rakib teaches, receiving information signals at a data switch (786 – figure 7A) connected to the network bus (760 – figure 7A) (Col. 33, lines 32-35 and Col. 34, lines 53-59).

Rakib further teaches, sending the information signals to one or more switch

ports of the data switch (Col. 33, lines 32-35 and Col. 34, lines 53-59).

Rakib discloses processing the information signals at a processor (729 –figure

7A) connected to the system data bus (756 – figure 7A) (Col. 33, lines 24-35) and

memory (129 – figure 7A) connected to the system data bus (756 – figure 7A).

However, Rakib fails to specify that the mass storage device (135 – figure 7A)

receives information signals and is adapted to receive and store the information signals

as a plurality of multimedia content items. Rakib further fails to disclose storing

information signals in memory as claimed.

In an analogous art, Russo discloses a method for multimedia on demand (Col.

3, lines 9-30), the method comprising a mass storage device (110 – figure 2)…that

receives the information signals, and stores the information signals (Col. 7, lines 44-46,

Col. 8, lines 7-41, and Col. 10, lines 21-25).

Russo discloses, a method for storing the information signals in memory (158 –

figure 2) connected to the system data bus (152 – figure 2) (Col. 9, line 62 to Col. 10,

line 5 and Col. 10, lines 14-20).

Russo teaches, automatically receiving a portion of a multimedia content item…

(Col. 10, lines 9-39).

Russo teaches, storing a portion of a multimedia content item (Col. 10, lines 14-

20). Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify Rakib with the teachings of Russo to include a

multimedia-on-demand table and instructions for the benefit of improving the user's on-demand viewing experience.

Rakib and Russo fail to disclose processing a portion of a multimedia content item at a transmission rate, the portion of the multimedia content item being less than the entirety of the multimedia content item, the transmission rate is less than the playback rate of the multimedia content item in bytes per second. In an analogous art, Craig discloses processing a portion of a multimedia content item at a transmission rate, the portion of the multimedia content item being less than the entirety of the multimedia content item in bytes per second (*i.e.,* slower than real-time) (Col. 11, line 60 to Col. 12, line 5), thus providing multiple service levels and charging subscribers accordingly. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Rakib and Russo to include processing the first multimedia content item at a less-than-real-time transmission rate for the benefit of providing flexible service arrangements that match the needs of subscribers.

The combination of Rakib, Russo, and Craig fail to disclose making a determination that continuous playback of the entirety of the multimedia content item can begin prior to the receipt of the entirety of multimedia content item.

In an analogous art, Chou discloses that continuous playback of the entirety of the multimedia content item can begin prior to receipt of the entirety of the multimedia content item, and based at least in part on the transmission rate and the playback rate (Col. 2, lines 7-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Rakib, Russo, and Craig

with the teachings of Chou to begin playback of an incomplete file in order to allow a

user to begin watching media content without having to wait for long periods of time for

the entire transfer to be complete.

10.   Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib,

Russo, Craig, and Chou as applied to claim 36 above, and further in view of Barton.

As for Claim 37, the combination of Rakib, Russo, and Craig disclose, in

particular Russo teaches, modifying a data table to include a multimedia content item

identifier, the multimedia content item identifier corresponding to the multimedia content

item (i.e., which programs stored on the storage device have been viewed) (Col. 5, lines

3-10, Col. 9, line 62 to Col. 10, line 5, and Col. 10, lines 14-39).

Russo further teaches, sending a multimedia usage report, the multimedia usage

report based at least in part on the data table (Col. 5, lines 12-31 and Col. 10, lines 9-

58).

However, the combination of Rakib, Russo, and Craig fail to disclose receiving a

storage position identifier from a service provider for each multimedia content item, the

storage position identifier specifying a logical storage position for the multimedia content

item, the storage position identifier updated by the service provider with each change in

the data table.

In an analogous art, Barton discloses receiving a storage position identifier

(aggregate attributes, e.g., viewer-based program ranking ¶ 210-217) from a service

provider for each multimedia content item, the storage position identifier specifying a

logical storage position for the multimedia content item, the storage position identifier

updated by the service provider with each change in the data table (¶ 219-220), thus

enabling service providers more compelling ways to promote viewing of television

programming. Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify the system of Rakib, Russo, and Craig with

the teachings of Barton to include a storage position identifier for the benefit of providing

a more engaging television viewing experience.

Conclusion

11.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Parry whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:00 AM EST to 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chris Parry
Examiner
Art Unit 2623

/CP/

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